# Future Acquisition and Technology Workforce Study (1999)

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# Background

- Section 912 (c), National Defense Authorization Act of 1998 directed the Secretary of Defense to submit to Congress an implementation plan to streamline acquisition organizations, workforce, and infrastructure.
- Many study groups formed to address different issues.

# Charter of future Acquisition & Technology workforce study group

- "describe performance characteristics and training requirements of a future A&T workforce."
- Product to Under Secretary of Defense A&T by Dec 15, 1999

# Methodology

**Current Workforce**

**Recommended Future Actions**

**Depict Future Environment**

- Global Trends
- Specific Reforms

**Determine Future Functions**

**Derive Competencies (Universal & Functional)**

**Developing the Workforce**

**Hiring & Retiring**

**Future A&T Workforce**

# Future A&T Environment

**Examples of Global Trends**
**(impacts entire federal workforce)**

- Smaller workforce
- Older workforce
- Commercial business orientation
- More generalists
- Information technology
- Knowledge management
- Cross-functional teaming

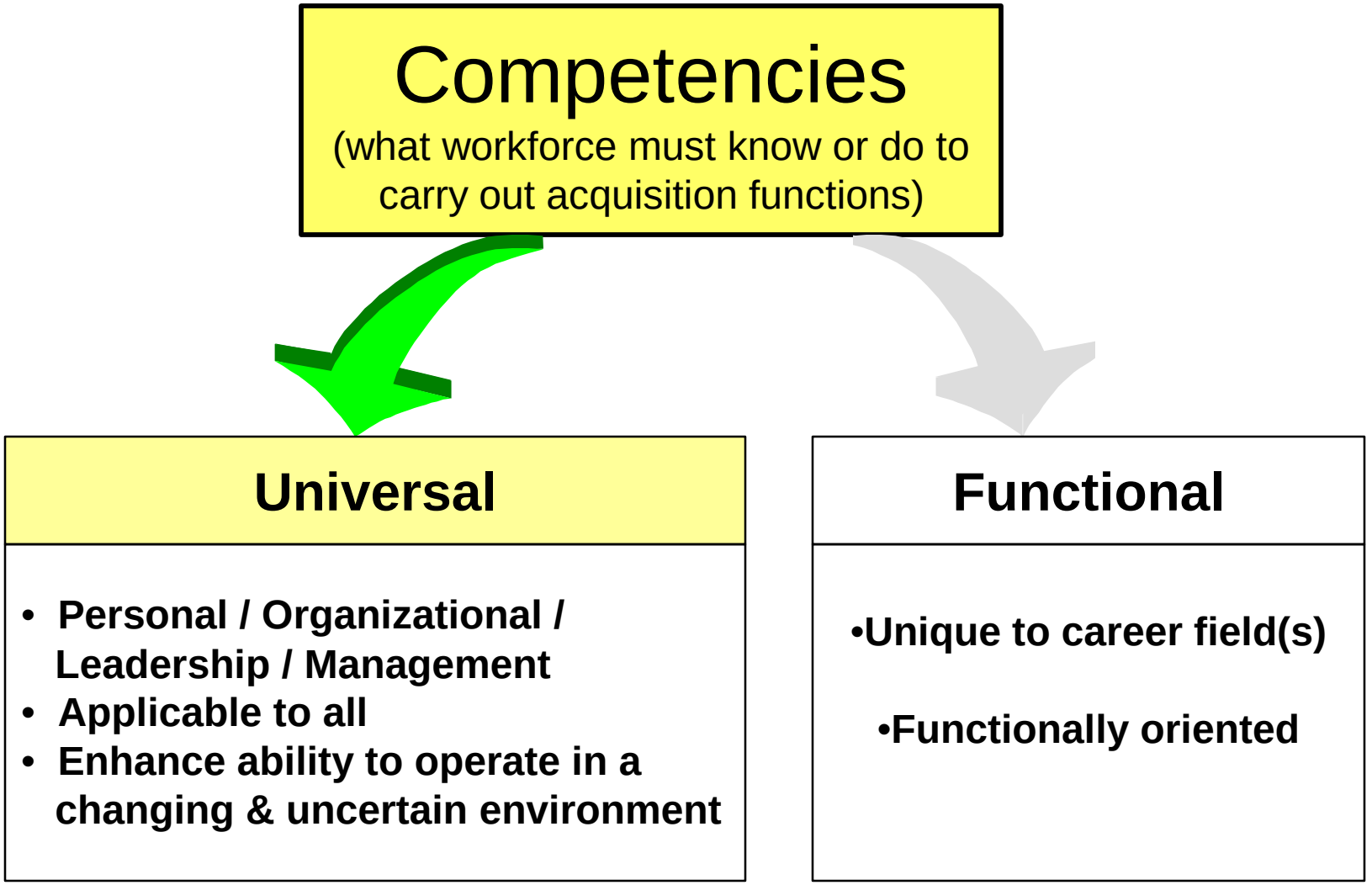
**Examples of Emerging Acquisition Practices**

- Competitive sourcing
- Integrated Paperless Acquisition
- Performance-based contracting
- Interoperability
- Price-based acquisition
- Commercial-Military Integration

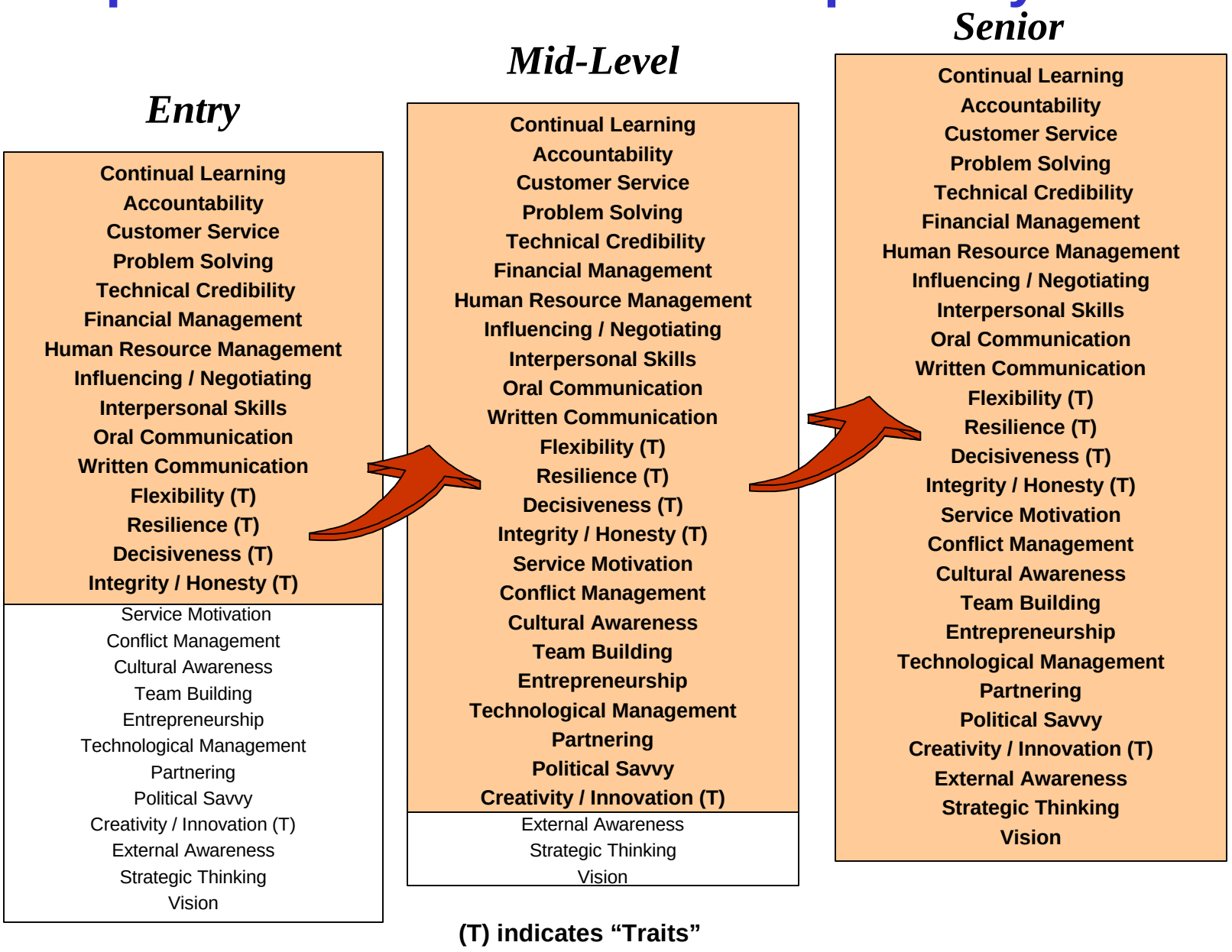
# Future Functions

- Activities workforce must perform to implement acquisition & logistics reforms and new practices
- 102 future functions derived from the future environment
- Examples of future functions:
  - Use simulation based acquisition to identify design issues and risks
  - Perform CAIV analysis
  - Operate in a commercial environment (e.g., common specs & standards; commercial accounting standards; performance based solicitations; FAR Part 12 acquisitions)
  - Conduct market research of national technology base

# A&T Workforce Competencies

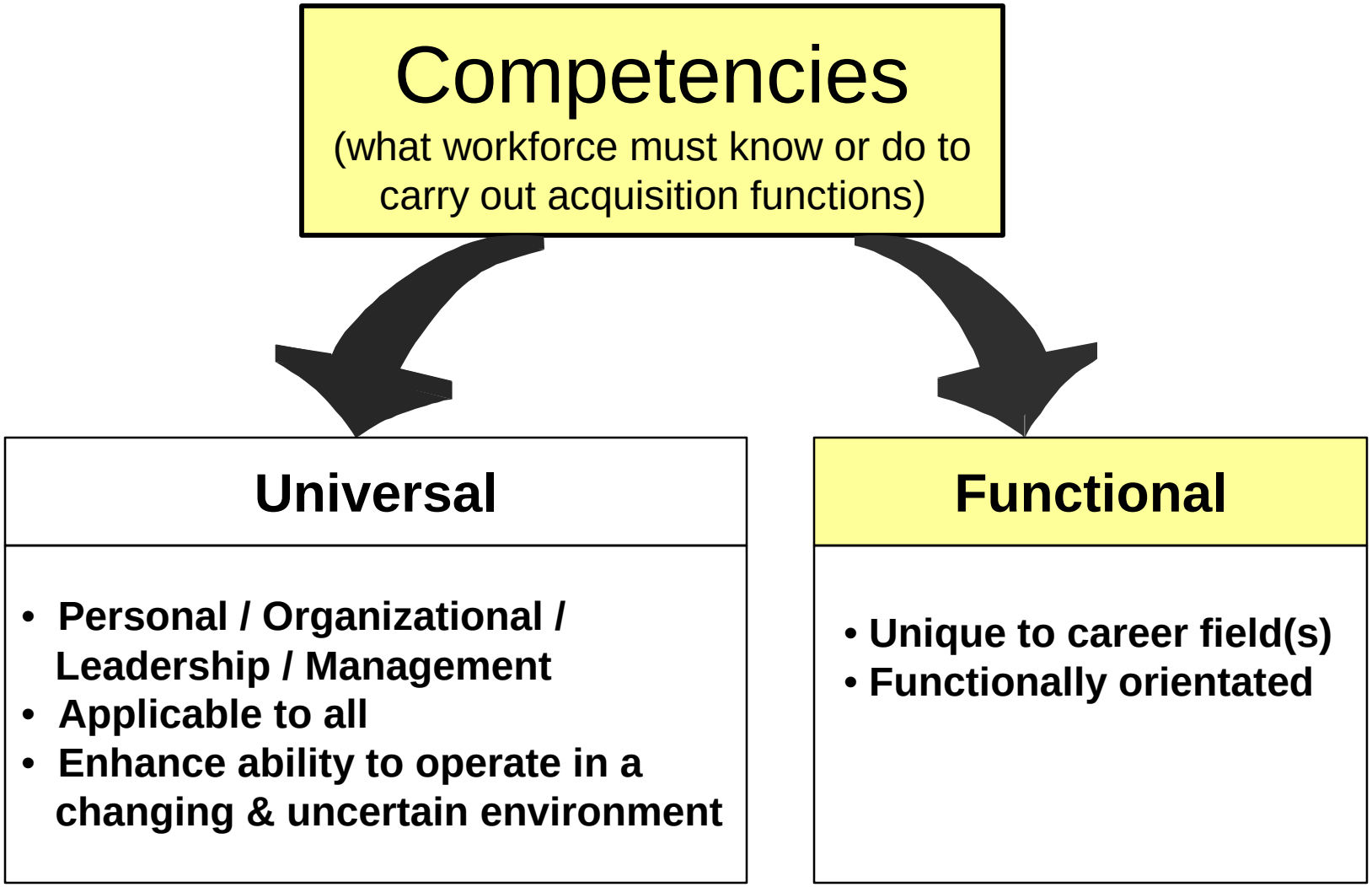


# Proposed A&T Universal Competency Model




**(T) indicates "Traits"**

# A&T Workforce Competencies



# Functional Categories Included

- Program Management
- Communications – Computer Systems
- Business, Cost Estimating & Financial Management (BCEFM)
- Contracting
- Industrial and/or Contract Property Management
- Auditing*
- System Planning, Research, Development & Engineering
- Test and Evaluation
- Acquisition Logistics
- Manufacturing, Production & Quality Assurance
- Science and Technology**
- Sustainment**

*** Not in this study/will be included in follow-on phase**

**** Not currently a DAWIA career management field**

# Functional Competency Results

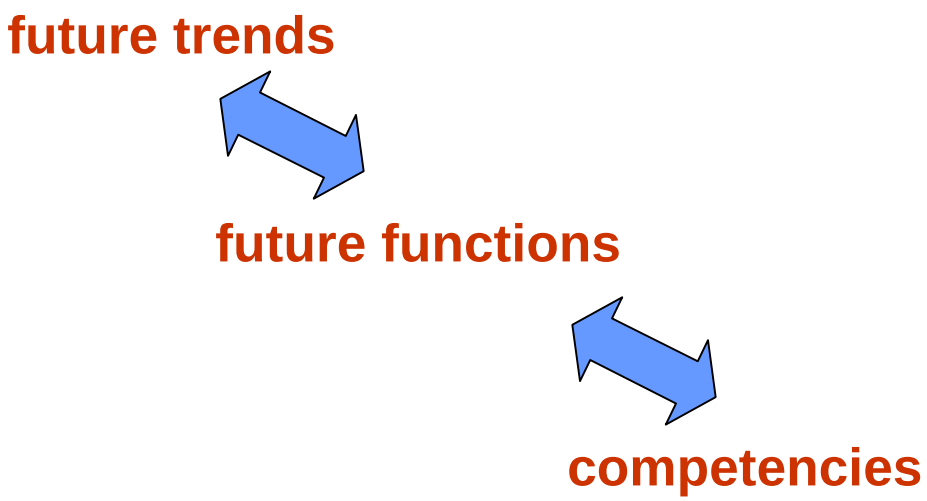
- Team consisted of functional board representatives.
- Clean sheet approach
- Developed 435 detailed functional competencies
  - Mix of new and existing competencies
  - Can be grouped by themes to indicate key future focus areas

# Examples of Themes Among Functional Competencies

- Commercial Practices
- Market Research
- Cost as an independent variable
- Total Ownership Cost
- Integrated product and process teams
- Simulation-based acquisition
- Business Analysis techniques
- Supply Chain Management
- Open architecture
- Performance-based acquisition
- Commercial & non-development items
- Software development

# Functional Competency Results

- Competencies captured in an interactive database that links:




- Database arrays competencies by career field / area
- Very useful capability in follow-on implementation

# Example of the Functional Competency Database

| **Environmental Trend** (what ATWF will face) | **Function** (ATWF Activities) | **Competencies** (What ATWF will need to know, or know how to do) | **Applicable to:** |
|---|---|---|---|
| Increased reliance on non-DoD Organizations | Conduct market research & analysis of the national base of technology | Understand basic market research techniques | **PM, Contracting, SPRDE, Acq Log, & Sustainment** |
| | | Understand technology for a specific business sector | **PM, SPRDE, & Sustainment** |
| | | | |
| Increased use of simulation based acquisition | Use simulation based acquisition to identify design issues and risks | Determine how to apply modeling and simulation when conducting performance studies, tradeoff and cost analyses | **PM, BCEFM, SPRDE & T&E** |

# Competencies Recommendations

- The DUSD (AR) and DASD(CPP) should determine the strategy for incorporating **universal competencies** into A&T development / training programs, considering costs and competing demands on workforce – Decentralized implementation
- The FIPTs/ OAIPT, with oversight by a Senior Steering Group, should:
  - Compare the future **functional competencies** with current competencies to determine:
    - gaps
    - current competencies that can be eliminated

  Accomplished by some functional areas

# Overview

**Current Workforce**

**Next Steps**

**Future Environment**

**Global Trends**

**Specific Reforms**

**Future Functions**

**Competencies (Universal & Functional)**

**Developing the Workforce**

**Hiring & Retiring**

**Future A&T Workforce**

# Developing the Workforce

- Education: -- Decentralized implementation
  - **Tuition assistance** and **degree completion** programs should target:
    - Foundational business and technical competencies
    - Future competencies
- Training -- Implemented
  - **Team training** increasingly important to impart new skills and break down organizational barriers to new practices
  - **Distributed training**
    - Competing demands on time of a smaller workforce heighten need for modular, distributed, just-in-time training
    - DAWIA courses, Continuous Learning and rapid implementation of latest initiatives
- Experience – Decentralized implementation
  - **Rotational /developmental assignments** broaden experience and develop multifunctional orientation

# Hiring and Retiring

***50% workforce turnover by 2005***

- Hiring – Decentralized implementation
  - **Intern programs**
    - Specific business / technical qualifications
    - Rotational assignments develop multi-functional outlook
  - **Student Educational Employment Program ("co-op programs")**
  - **Feeder Universities:** academic programs focused on government needs
  - **Term hire**
    - Brings needed competencies and experience into DoD for **specified periods** of time
    - **Intergovernmental Personnel Act** a useful program that should be expanded to include industry – Legislative language proposed
  - Retirements **"phased"** to avoid rapid loss of experience and make full-time equivalents (FTE's) available for new hires

# Closing Comments

- Vital process
- Sound methodology
- Functional area resistance
- Decentralized execution hinders implementation tracking and accountability

Complete report located at:

http://gravity.lmi.org/futurewf/